

LIST OF CLAIMS

1. (Previously presented) An information providing device installed in a leader vehicle that leads a follower vehicle, for providing the follower vehicle with guidance prepared by the leader vehicle, the information providing device comprising:

a state detector configured to detect a state change in the leader vehicle to output a detecting signal, wherein the state change occurs in the vehicle when a driver of the vehicle provides an input to the vehicle; and

a guidance generator configured to prepare, in response to the detecting signal, the guidance to guide the follower vehicle, wherein the guidance includes a photographed image of a view ahead of the leader vehicle, and information of the state change overlaid on the photographed image.

2. (Original) The information providing device according to claim 1, wherein the state detector is coupled to a turn signal installed in the leader vehicle, detects operation of the turn signal and outputs the detecting signal.

3. (Original) The information providing device according to claim 2, wherein the guidance generator obtains a directional input to the turn signal.

4. (Original) The information providing device according to claim 1, wherein the guidance generator obtains a position of the leader vehicle.

5. (Original) The information providing device according to claim 1, wherein the guidance generator obtains time on the leader vehicle.

6. (Original) The information providing device according to claim 1, wherein the guidance generator obtains a running speed of the leader vehicle.

7. (Original) The information providing device according to claim 1, wherein the guidance generator obtains a relative distance between the leader vehicle and the follower vehicle according to a running speed of the leader vehicle, a position of the leader vehicle related to time, a running speed of the follower vehicle, and a position of the follower vehicle related to time.

8. (Previously presented) The information providing device installed in a leader vehicle that leads a follower vehicle, for providing the follower vehicle with guidance prepared by the leader vehicle, the information providing device comprising:

a state detector configured to detect a state change in the leader vehicle to output a detecting signal, wherein the state change occurs in the vehicle when a driver of the vehicle gives an input to the vehicle; and

a guidance generator configured to prepare, in response to the detecting signal, guidance to guide the follower vehicle, wherein the guidance including a photographed image of a view ahead of the leader vehicle,

wherein:

the state detector coupled to a lamp switch detects operation of the lamp switch installed in the leader vehicle and outputs the detecting signal; and

the guidance includes an image ahead of the leader vehicle photographed when the lamp is turned on.

9. (Original) An information providing device installed in a follower vehicle that follows a leader vehicle, comprising:

a guidance obtainer configured to obtain guidance including a photographed image of a view ahead of the leader vehicle that leads the follower vehicle, a position and time indicating where and when the guidance was prepared;

a history detector configured to detect running history of the follower vehicle; and

an output unit configured to provide with the guidance obtained by the guidance obtainer, wherein the guidance obtainer includes,

an eraser configured to compare the running history detected by the history detector with the position where the guidance was prepared and erase the guidance if a result of the comparison shows that the follower vehicle has already passed the position; and

a selector configured to select the oldest guidance from among guidance pieces not erased by the eraser and transfer the selected guidance to the output unit.

10. (Previously presented) An information providing device comprising:

a guidance obtainer configured to obtain guidance including a photographed image of a view ahead of a leader vehicle that leads a follower vehicle, information of a state change of the leader vehicle overlaid on the photographed image, said state change occurring in the leader

vehicle when a driver of the leader vehicle gives an input to the leader vehicle, and a position where the guidance was prepared;

a history detector configured to detect running history of the follower vehicle; and
an output unit configured to provide with the guidance obtained by the guidance obtainer,
wherein the guidance obtainer includes a selector configured to compare the running history with the position, the selector configured to select the guidance that was prepared at the closest position ahead of a present position of the follower vehicle, and the selector configured to transfer the selected guidance to the output unit.

11. (Original) The information providing device according to claim 10, wherein:

the obtained guidance includes the position where the leader vehicle prepared the obtained guidance, time when the leader vehicle passed the position, and a speed of the leader vehicle; and

the guidance obtainer finds a relative distance between the leader vehicle and the follower vehicle according to the position, time, and speed of the leader vehicle contained in the obtained guidance and the position, time, and speed of the follower vehicle detected by the history detector.

12. (Previously presented) An information providing system comprising:

a sender used when a vehicle is a leader vehicle that leads a follower vehicle, wherein the sender is configured to provide the follower vehicle with guidance for guiding the follower vehicle, the sender including:

a state detector configured to detect a state change in the leader vehicle, wherein the state change occurs in the vehicle when a driver of the vehicle provides an input to the vehicle; and

a guidance generator configured to prepare, in response to the state change detected by the state detector, the guidance including a photographed image of a view ahead of the leader vehicle, and information of the state change overlaid on the photographed image;

and

a presenter, installed in the follower vehicle, configured to receive the sent guidance and to present the guidance, the presenter including:

a guidance obtainer configured to obtain the guidance including the photographed image of the view ahead of the leader vehicle; and

an output unit configured to provide the user with the guidance obtained by the guidance obtainer.

13. (Previously presented) An information providing device installed in a leader vehicle that leads a follower vehicle, for providing the follower vehicle with guidance prepared by the leader vehicle, the information providing device comprising:

a state detecting means for detecting a state change in the leader vehicle to output a detecting signal, wherein the state change occurs in the vehicle when a driver of the vehicle provides an input to the vehicle; and

a guidance generating means for preparing, in response to the detecting signal, guidance to guide the follower vehicle, the guidance including a photographed image of a view ahead of the leader vehicle, and information of the state change overlaid on the photographed image.

14. (Previously presented) A program product in a system-readable medium for execution by a system installed in a leader vehicle that leads a follower vehicle, the program product comprising:

detecting instructions that causes the system to detect a state change in the leader vehicle to output a detecting signal, wherein the state change occurs in the vehicle when a driver of the vehicle provides an input to the vehicle;

guidance generating instructions that causes the system to prepare, in response to the detecting signal, guidance to guide the follower vehicle, wherein the guidance includes a photographed image of a view ahead of the leader vehicle, and information of the state change overlaid on the photographed image; and

transferring instructions that cause the system to transfer the prepared guidance to the follower vehicle.

15. (Original) A program product in a system-readable medium for the system installed in a follower vehicle that follows a leader vehicle, the program product for information providing, the program product comprising:

guidance obtaining instructions that obtain guidance including a photographed image of a view ahead of the leader vehicle that leads the follower vehicle, a position and time indicating where and when the guidance was prepared;

a history detecting instructions that detect running history of the follower vehicle; and
a providing instructions that provide a user with the guidance obtained,
wherein the guidance obtaining instructions includes,
erasing instructions that compare the running history detected by the history detecting
instructions with the position where the guidance was prepared and erase the guidance if a result
of the comparison shows that the follower vehicle has already passed the position; and
selecting instructions that select the oldest guidance from among guidance pieces not
erased by the eraser and transfer the selected guidance.

16. (Previously presented) A program product in a system-readable medium for
information providing, the program product comprising:

guidance obtaining instructions that obtain guidance including a photographed image of a
view ahead of a leader vehicle that leads a follower vehicle, information of a state change of the
leader vehicle overlaid on the photographed image, said state change occurring in the leader
vehicle when a driver of the leader vehicle gives an input to the leader vehicle, and a position
where the guidance was prepared;

detecting instructions that detect running history of the follower vehicle; and

providing instructions that provide with the guidance obtained,

wherein the guidance obtaining instructions comprises selecting instructions for
comparing the running history detected by the history detecting instructions with the position
where the guidance was prepared, the selecting instructions for selecting guidance that was
prepared at the closest position ahead of a present position of the follower vehicle, and the
selecting instructions for transferring the selected guidance to the providing instructions.

17. (Previously presented) The device of claim 1, wherein the state detector detects the input to the vehicle by the driver, and generates the output signal according to the detected input by the driver.

18. (Previously presented) The system of claim 12, wherein the state detector detects the input to the vehicle by the driver, and generates the output signal according to the detected input by the driver.

19. (Previously presented) The device of claim 13, wherein the state detecting means detects the input to the vehicle by the driver, and generates the output signal according to the detected input by the driver.

20. (Previously presented) The program product of claim 14, wherein the detecting instructions cause the system to detect the input to the vehicle by the driver, and to generate the output signal according to the detected input by the driver.